

MONTGOMERY COUNTY DEPARTMENT OF POLICE



FALSE ALARM REDUCTION PROGRAM 2019 ANNUAL REPORT

MARCH 2020

OVERVIEW

The False Alarm Reduction Section (FARS) of the Montgomery County Department of Police was created to administer Chapter 3A, Alarms, of the Montgomery County Code and reduce the number of false alarms that police must respond to each year. False alarms can take police officers and other public safety personnel away from other events, endangering responding authorities and the community, and wasting public resources.

In 2019, there were a total of **12,583 requests** for dispatch to which police did not respond, thereby reducing the negative impact of false alarms on the quality of service and safety. This represents a 24% increase compared to 2018. It should be noted that this increase was, in part, due to the successful resolution of all data transmission issues associated with the Computer Aided Dispatch (CAD) system that went live in 2016.¹ The time saved by Montgomery County Police by not responding to these cancelled alarms equates to approximately **6,710 work hours**.²

The number of new alarm users decreased in 2019 compared to previous years. There were about **4,900** new alarm users in 2019, which was about a **21%** decrease compared to 2018. In the more than 25 years since the program was initiated, the section has consistently increased the number of alarm users who experience zero false alarms. **In 2019, over 80,000 alarm users, or about 88%, had zero false alarms.**

FARS continues its success in reducing false alarms and increasing the number of alarm users with zero false alarms – all positive signs. The *total* number of registered alarm users continues to rise, and, despite the increase in registered users in 2019, police officers responded to *fewer* alarm calls in 2019 than in 1994 when the enforcement of the amended burglar alarm law went into effect. These statistics, coupled with a 209% increase in the number of registered alarm users over the same period, demonstrates that substantial and *sustained* false alarm reduction has been achieved.

FARS staff plans to continue its amplified enforcement initiative and remain in the forefront as subject matter experts in the field of false alarm management and reduction.

2019 FALSE ALARM REDUCTION

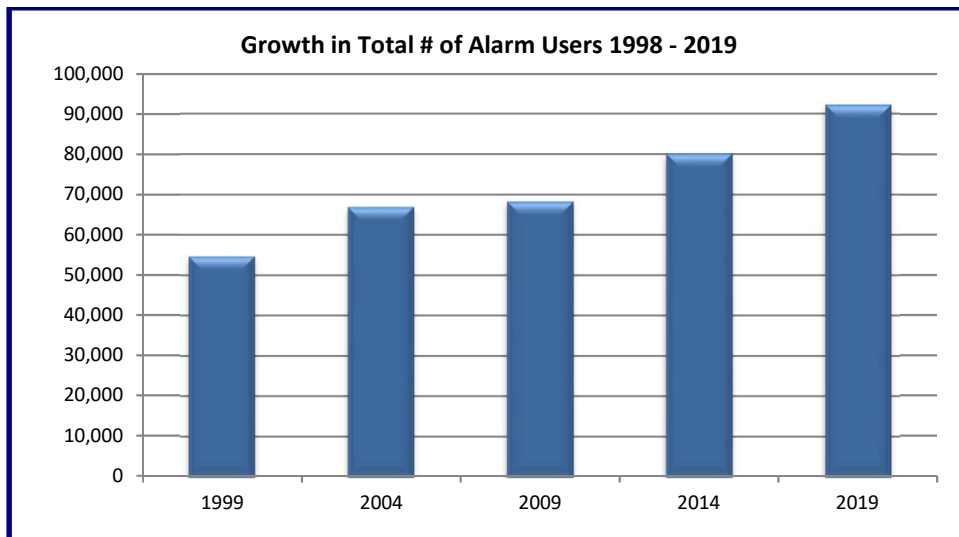
Alarm Users

Montgomery County is the most populous jurisdiction in the state of Maryland, consisting of nearly 1.1 million residents. In 2019, FARS received a total of 4,895 new alarm user registration forms (residential and commercial). Although this was about a 20.0% decrease in the total number of registered alarm users between 2018 and 2019, the number of

¹For about 18 months officers responded to all alarm calls resulting from a communication error between the false alarm billing and tracking system and the Motorola Computer Aided Dispatch system which was resolved on January 4th, 2019.

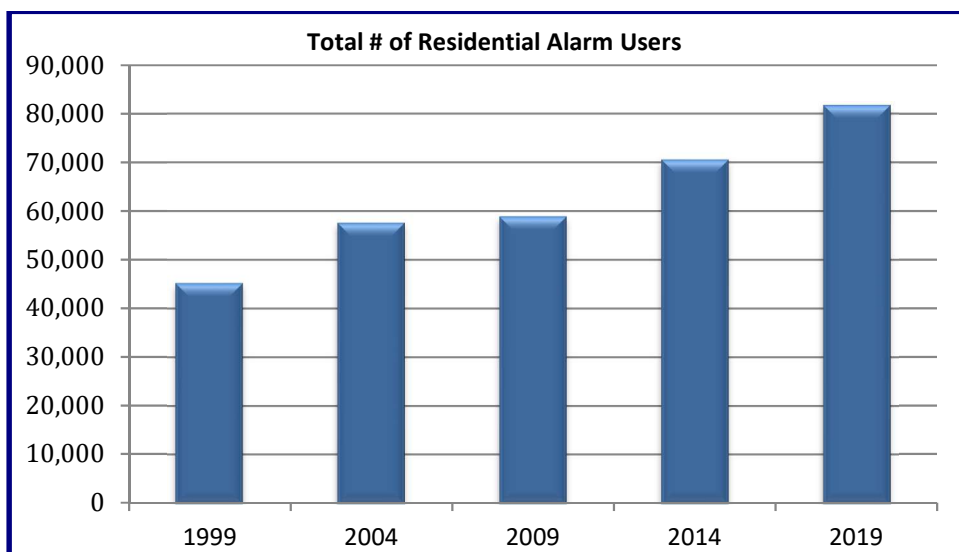
² This figure is based on the average time of 16 minutes each for two officers per alarm call.

registered users remains above 91,700 users. Of this number 81,444 were residential users and 10,339 were commercial users.



The alarm user registration renewal process permits FARS to keep the alarm user database current by removing those users who no longer have an alarm system or have moved from the county. This allows FARS to perform statistical analysis using more accurate numbers, which provides for more meaningful reporting.

Overall, Montgomery County has experienced a 209% increase in total alarm registrants since 1994, driven primarily by the number of residential alarm users – more than 81,400 users - an increase of 177% since 1995.

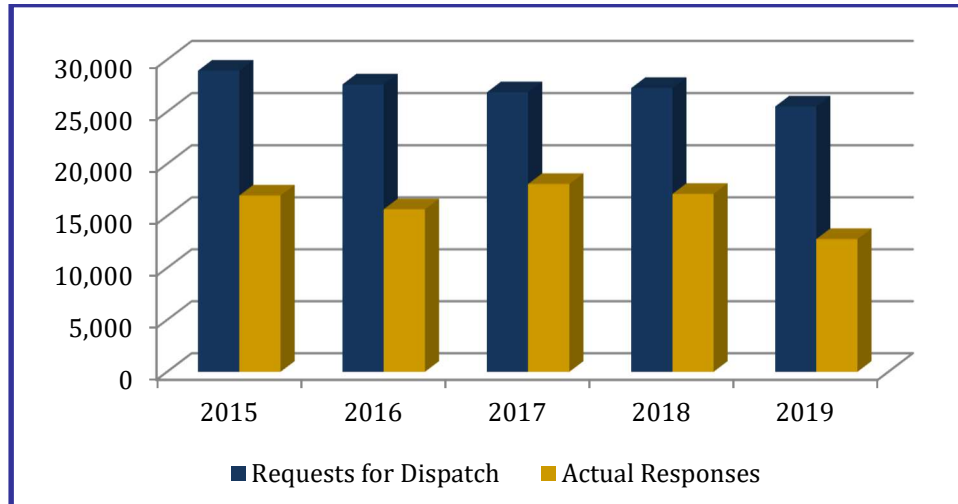


Alarm Responses

A false alarm is an alarm system activation that results in a dispatch request that is not cancelled prior to the arrival of law enforcement at the site and in which the responding authority finds no evidence of criminal activity to justify a police response. There are several common causes of false alarms:

- Inadequate training of those allowed access to the system, including accidental alarms caused by house/pet sitters, house cleaners, contractors, etc.
- Pets.
- Weak or depleted system batteries.
- Open, unlocked, loose-fitting, or defective door/window sensors.
- Drafts from air conditioners/heaters or open windows that cause movement of plants, curtains, etc.

The graph below shows the number of requests for dispatch versus actual responses. *Requests for dispatch* include the number of times that an alarm monitoring company calls 9-1-1. *Actual response totals* include the number of times that an officer arrives at a location and investigates the cause of the alarm. Alarm companies are required to cancel a police response when they determine that the alarm activation is false or a response is not needed. **In 2019, alarm companies cancelled 5,983 requests for dispatch or about 23% of the total requests for dispatch.** These cancellations provided officers with more time to engage in other more critical law enforcement activities and community policing initiatives.



Historically, the number of dispatch requests has been declining: the numbers have dropped about 42% over the last 25 years and about 12% over the last five years. In 2019, the number of dispatch requests decreased slightly, by about 6%, from 27,256 in 2018 to 25,508. The number of actual responses to alarm calls decreased by about 4,300, which was a decrease of about 25% in 2019 compared to 2018. The decrease in responses between 2018 and 2019 was substantial due to FARS successfully resolving the data transmission issues associated with the Computer Aided Dispatch (CAD) system that went live in 2016. More importantly, the percentage of dispatch requests that resulted in a response was lower (50%) in 2019

than in 2018 when the percentage was 63%. This number has decreased significantly this year, as all technical issues have been resolved.

False Alarm Rates

The false alarm rate is the most common measure of false alarm reduction as it calculates the number of false alarm dispatches relative to the total number of alarm users.

Year	Total Registered Users	Total False Alarms	False Alarm Rate
1994	29,756	42,821 ³	1.44
2004	63,748	19,190	.30
2009	71,011	17,533	.25
2014	81,513	16,709	.20
2019	89,833	13,723	.15

This table demonstrates that, although the total number of registered users has increased over the last 25 years, the false alarm dispatch rate has continued to drop. In 2019 the dispatch rate was down to .15 as compared to .17 in 2018, which equates to roughly a 12% decrease. Montgomery County's dispatch rates remain among the lowest in the country.

Another measure of program effectiveness is the total number of registered alarm users who had NO false alarms. In 2019, a total of 80,673 alarm users had ZERO false alarms; essentially, 88% of all alarm users in Montgomery County successfully managed their alarm systems. This contrasts with 1995, the year after the county alarm code was implemented, when only 56.2% of the registered alarm users had no false alarms. This is a significant improvement, given the increase in the total number of users. The table below represents the false alarm numbers over the last two decades.

2019 <i>Total Users = 89,833</i>		2005 <i>Total Users = 63,970</i>		1995 <i>Total Users = 36,436</i>	
False Alarms	Alarm Users	False Alarms	Alarm Users	False Alarms	Alarm Users
0	80,673	0	53,240	0	20,468
1-2	8,312	1-2	9,550	1-2	13,362
3-5	695	3-5	982	3-5	1,988
6-15	149	6-15	190	6-15	599
16-31	4	16-31	8	16-31	19

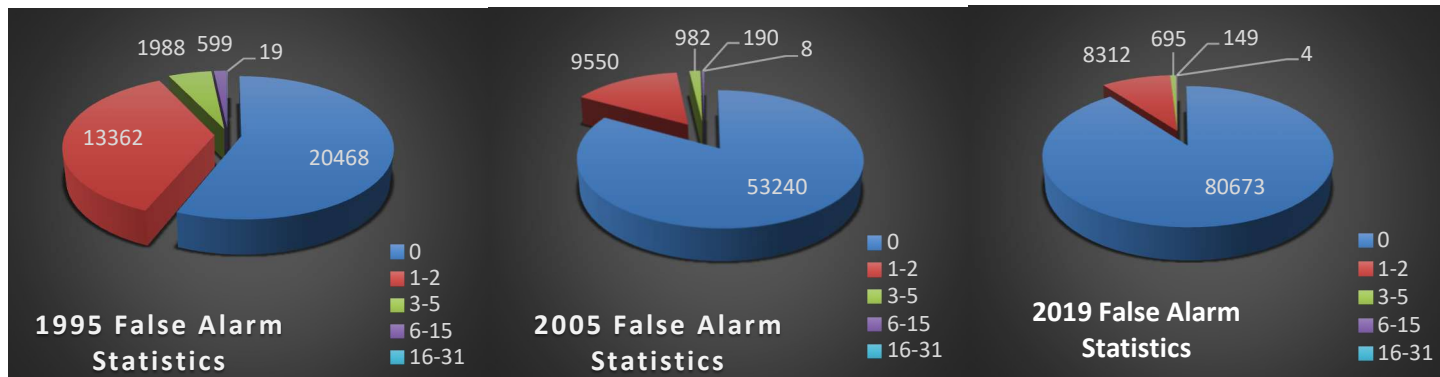
A closer examination reveals that commercial alarm users have improved by 218% since 1995 in terms of eliminating false alarms, while residential users have achieved about 304% success in managing false alarms. In 1995, nearly 7% of all commercial alarm users had six or more false alarms. In 2019, there were a total of 153 alarm users that had six or more false

³ The number of verified calls for 1994 is unknown. The total number of alarm dispatches was 42,821.

alarms. Out of this total, 148 or 96.7% were commercial alarm users. On the residential side, there were five alarm users or 3.3% that accounted for six or more false alarms. This was about an 18% decrease over 2018.

Number of Users with No False Alarms				
	1995	2005	2019	% Change
Commercial	2,352	5,730	7,485	218.23
Residential	18,116	47,510	73,168	303.88

The charts below graphically show that more alarm users (as a percentage of total alarm users for a given year) are achieving the zero false alarm thresholds. This statistic, which is supported by the low false alarm rate, is indicative of the success of the overall false alarm reduction program. These reductions become more significant when viewed in the context of the steady increase in the number of alarm users each year. This is a positive measure of the program's impact on the county's resources.



Cost Avoidance

As a direct result of FARS' strict enforcement of the alarm law, there were 12,583 alarm calls to which police officers were not required to respond in 2019. Using the averages established by the Police Department, this equates to approximately **6,710 hours of police officer time, or an estimated \$1,421,879 in cost avoidance.** Monetary cost avoidance is based on an average salary cost⁴ of \$113. Work year savings are based on an average of 16 minutes per alarm response by two officers.

REVENUE

The charts on the next two pages reflect the revenue collected by FARS for alarm user registration and renewal fees, false alarm response fees, alarm business license and administrative fees, civil citations, and appeal filing fees.

⁴ This includes fringe benefits, operating expenses, and vehicles but does not include costs related to policing, such as training, the cost of dispatching, etc.

The first chart covers *calendar* year 2019. The second chart covers *fiscal* year 2019. The FY2019 chart is included only as a reference because budget projections are based on fiscal rather than calendar years. The more accurate chart is the calendar year 2019 chart, as false alarms and the resulting false alarm response fees are calculated on a calendar year basis.

CALENDAR YEAR 2019	ACTUAL REVENUES
<u>Alarm User Registration Fees</u>	
Residential	\$135,210
Commercial	<u>14,100</u>
TOTAL	\$149,310
<u>Alarm User Registration Renewal Fees</u>	
Residential	\$200,200
County Attorney Collections	<u>1,975</u>
Total Residential	\$202,175
Commercial	\$ 30,788
County Attorney Collections	<u>545</u>
Total Commercial	\$ 31,333
TOTAL	\$233,508
<u>False Alarm Response Fees</u>	
Residential	\$ 65,135
County Attorney Collections	<u>19,302</u>
Total Residential	\$ 84,437
Commercial	\$245,430
County Attorney Collections	<u>24,382</u>
Total Commercial	\$269,812
TOTAL	\$354,249
<u>Alarm Business Fees</u>	
License	\$ 74,425
Civil Citations	424,250
Administrative Fees	<u>0</u>
TOTAL	\$498,675
<u>Appeal Filing Fees</u>	
Residential	\$ 45
Commercial	<u>0</u>
TOTAL	\$ 45
GRAND TOTAL	\$1,235,787

FISCAL YEAR 19	ACTUAL REVENUES
<u>Alarm User Registration Fees</u>	
Residential	\$136,955
Commercial	<u>14,580</u>
TOTAL	\$151,535
<u>Alarm User Registration Renewal Fees</u>	
Residential	\$180,515
County Attorney Collections	<u>2,125</u>
Total Residential	\$182,640
Commercial	\$23,299
County Attorney Collections	<u>825</u>
Total Commercial	\$24,124
TOTAL	\$206,764
<u>False Alarm Response Fees</u>	
Residential	\$ 58,700
County Attorney Collections	<u>19,755</u>
Total Residential	\$ 78,455
Commercial	\$262,141
County Attorney Collections	<u>34,060</u>
Total Commercial	\$296,201
TOTAL	\$374,656
<u>Alarm Business Fees</u>	
License	\$ 71,425
Civil Citations	374,750
Administrative Fees	<u>00</u>
TOTAL	\$ 446,175
<u>Appeal Filing Fees</u>	
Residential	\$ 30
Commercial	<u>15</u>
TOTAL	\$ 45
GRAND TOTAL	\$1,179,175

CALENDAR YEAR COMPARISON	ACTUAL REVENUES		
	2017	2018	2019
<u>Alarm User Registration Fees</u>			
Residential	\$176,320	\$149,985	\$135,210
Commercial	<u>16,085</u>	<u>16,640</u>	<u>14,100</u>
TOTAL	\$192,405	\$166,625	\$149,310
<u>Alarm User Registration Renewal Fees</u>			
Residential	\$180,081	\$182,105	\$200,200
County Attorney Collections	<u>1,305</u>	<u>2,273</u>	<u>1,975</u>
Total Residential	\$181,386	\$184,378	\$202,175
Commercial	\$26,669	\$ 28,240	\$ 30,788
County Attorney Collections	<u>855</u>	<u>955</u>	<u>545</u>
Total Commercial	\$27,524	\$29,195	\$ 31,333
TOTAL	\$208,910	\$213,573	\$233,508
<u>False Alarm Response Fees</u>			
Residential	\$ 61,735	\$ 62,848	\$ 65,135
County Attorney Collections	<u>4,070</u>	<u>24,928</u>	<u>19,302</u>
Total Residential	\$ 75,805	\$ 87,776	\$ 84,437
Commercial	\$317,387	\$291,119	\$245,430
County Attorney Collections	<u>59,503</u>	<u>49,255</u>	<u>24,382</u>
Total Commercial	\$376,890	\$340,374	\$269,812
TOTAL	\$452,695	\$428,150	\$354,249
<u>Alarm Business Fees</u>			
License	\$ 70,316	\$ 81,200	\$ 74,425
Civil Citations	290,100	354,000	424,250
Administrative Fees	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	\$360,416	\$435,200	\$498,675
<u>Appeal Filing Fees</u>			
Residential	\$ 15	\$ 30	\$ 45
Commercial	<u>45</u>	<u>30</u>	<u>0</u>
TOTAL	\$ 60	\$ 60	\$ 45
GRAND TOTAL	\$1,214,486	\$1,243,608	\$1,235,787

The collection of false alarm response fees is always a priority for FARS. Strict enforcement of this aspect of the alarm law clearly shows that Montgomery County is serious about the issue of false alarms. If alarm users fail to remit the required false alarm response fees, FARS can place their account into a denied response status. Denied response means that the police will not respond to an alarmed location until the alarmed location's financial obligation is satisfied. Also, FARS refers these accounts to the Office of the County Attorney for collection action.

FARS collection rate was up from 88% in 2018 to 92% in 2019. The combination of the Office of the County Attorney as the FARS Collector and the suspension of police response as specified in Chapter 3A, Alarms, for failure to remit false alarm response fees greatly enhances FARS' ability to collect on unpaid bills.

The following chart reflects the amount billed for false alarm response fees in 2019 versus the amount collected for both residential and commercial alarm users. Please note that the "collected" amount in the following chart reflects payments made against false alarms that occurred in 2019. The actual collection of monies for calendar year 2019 false alarms extends into calendar year 2020 and therefore reflects different totals than the Calendar Year Revenue Chart. Furthermore, this chart concentrates on calendar year 2019 and does not account for monies received from accounts that owed for previous years.

Calendar Year 2019 Billed versus Collected False Alarm Response Fees				
False Alarm Response Fees	Billed	Collected*	Past Due (>30 & <51 days overdue)	Delinquent (>50 days overdue)
Commercial	\$267,725	\$ 245,675	\$ 5,405	\$ 17,175
Residential	\$ 79,650	\$ 77,140	\$ 2,350	\$ 16,075
Total	\$347,375	\$322,815	\$ 7,755	\$33,250

**Represents fees collected in 2019 and 2020 against false alarm response fees billed in 2019.*

FARS is in the process of attempting to collect the past due amounts listed above. FARS has sent the overdue notices to all affected alarm users. The \$33,250 listed above will either has or will be referred to the Office of the County Attorney for collection in early 2020, and the affected alarm users will be placed in a non-response status until payment is received.

CONCLUSION

Overall, the 2019 Annual Report on the status of the False Alarm Reduction Program is positive. In 2019, revenue was down by less than 1.0% as compared to 2018, the number of dispatch requests from the alarm companies has declined by about 42% since 1994, and the total number of responses has declined by 70% over the same time. This number is slightly higher than in 2018. In April 2017, the Emergency Communications Center (ECC) went live with their Motorola Premier One Computer Aided Dispatch (CAD) system. FARS worked cohesively with the ECC to identify and remedy any discrepancies between our current CryWolf false alarm tracking and billing system and the new Motorola Premier One CAD system. The issues with the integration and data transmission accuracy between the CAD system and the CryWolf system were successfully resolved as of January of 2019. The ECC was instructed to resume normal operations with respect to alarm calls. As a result, the response by police officers returned to more normal standards in 2019 as compared to both 2017 and 2018. Alarm companies are also doing better at managing and vetting the alarm systems that they install or monitor, and homeowners are being increasingly more responsible with their alarm systems.

FARS will continue its strict enforcement of all requirements for requesting dispatch, including providing the correct alarm user registration and alarm business license numbers. The legally mandated non-response provisions of the alarm law resulted in 1595 requests for dispatch that were denied as a result of the violation status of the alarm user or alarm business in 2019. This represents 6.3% of all requests for dispatch in 2019, which is a sizeable increase compared to 2018 when the percentage was 2.3%. This increase is directly correlated with FARS reinstating the ability to deny dispatch as mandated by the non-response provisions in the alarm law due to resolving the data transmission concerns between the CryWolf system and the CAD system at the ECC.

There must be a continued effort to provide education and early intervention to alarm users who are experiencing false alarms so that these unnecessary alarm calls do not reach unacceptable thresholds and waste valuable resources. In 2019, FARS continued its enforcement efforts in the major offender project, which reaches out to alarm users experiencing excessive false alarms. The major offender project is instrumental in ensuring that alarm users experiencing excessive false alarms are educated about their alarm system and the impact on police resources. The number of alarm users that were in the 16 to 31 false alarm counts stayed the same in 2019 compared to 2018, with only four commercial alarm users in this range. In 2020, FARS staff will continue its ramped-up efforts to intervene and educate alarm users that fall into this category quickly and expeditiously to ensure that we continue to reduce the number of alarm users in this range.

In 2019, FARS started an initiative to educate alarm users about false alarms, their impact on police resources, and how to reduce the false alarm epidemic. On a bi-weekly basis, FARS is uploading bulletins with information on all police social media webpages. The information being shared ranges from tips and tricks for reducing false alarms to what to do in the event of unexpected inclement weather. Education is key to the success of any false alarm program. As such, FARS decided that providing information to the residents and businesses of the County via social media would be the first step in getting the word out about false alarms, responsible management of alarms systems and ways to reduce false alarms. FARS has an abundance of information to release and plans on continuing the initiative indefinitely.

In 2019, FARS management reviewed the Executive Regulation and identified areas that needed to be updated. More specifically, the Alarm Installation Standards section needed to be updated to make it current with today's standards. Further, we added Enhanced Call Verification, which requires alarm companies to make two calls to two different numbers on the alarm user's call list before requesting dispatch. This enhancement allows additional time for the alarm company to verify that there is an actual event taking place before requesting dispatch from police. The revised Executive Regulation was submitted to the County Council at the end of December 2018 and was listed in the Register for one month starting on January 1st, 2019. After a few updates and modifications, FARS was successful in getting the Executive Regulation modified and approved by the County Council and the new Executive Regulation went into effect on October 29th, 2019.

Looking ahead to 2020, FARS will continue its efforts to pioneer new strategies to reduce the wasted allocation of resources by increasing instruction to involved stakeholders, including the ECC and the Patrol Services Bureau, by identifying targeted discrepancies, and by engaging with users and alarm companies through timely correspondence. Further, FARS plans to become more engaged with the community by attending national nights out, visiting major offender locations, working with local realtor associations, and conducting site visits to alarm locations as needed. FARS will also start an open discussion with alarm companies and alarm monitoring companies regarding the County's alarm law and the entities responsibilities. The effort is to educate the alarm companies and alarm monitoring companies on how to better operate in Montgomery County and to provide them with a resource to navigate issues they face daily.